

## WHAT IS CLAIMED IS:

1. A semiconductor wafer comprising first and second semiconductor wafers having crystal orientation display sections to be nicks indicative of crystal orientations  
5 formed on fringes thereof,

wherein said crystal orientation display sections are indicative of an identical crystal orientation in said first and second semiconductor wafers, and

said first and second semiconductor wafers are bonded with said crystal orientation display sections shifted from each other.

2. The semiconductor wafer according to claim 1, wherein both of said first and second semiconductor wafers are (100) wafers in which (100) planes are main surfaces, and

said crystal orientation display sections are shifted from each other by 45  
15 degrees or 135 degrees.

3. The semiconductor wafer according to claim 2, wherein said first semiconductor wafer is a wafer for a support substrate and said second semiconductor wafer is a wafer for a device formation, and

20 a main surface of said wafer for the device formation is provided with a semiconductor device including a MOS transistor in which a channel direction between a source and a drain is parallel with a direction of a crystal orientation  $\langle 100 \rangle$ .

4. The semiconductor wafer according to claim 1, wherein said first  
25 semiconductor wafer is a wafer for a support substrate,

said second semiconductor wafer is a wafer for an SOI layer, and  
an insulating film is formed on a main surface of at least one of said wafer for  
the support substrate and said wafer for the SOI layer.

5           5. A semiconductor wafer comprising:

a first semiconductor wafer; and

a second semiconductor wafer having a crystal orientation display section to be  
a nick indicative of a crystal orientation formed on a fringe,

10           wherein said first and second semiconductor wafers are bonded to each other  
such that a part of a main surface of said first semiconductor wafer is exposed to said  
crystal orientation display section of said second semiconductor wafer, and

printing is given to said part of said main surface of said first semiconductor  
wafer.

15           6. The semiconductor wafer according to claim 5, wherein a crystal  
orientation display section to be a nick indicative of a crystal orientation is also formed on  
a fringe of said first semiconductor wafer, and

said crystal orientation display section of said first semiconductor wafer and  
said crystal orientation display section of said second semiconductor wafer form an angle  
20   of 180 degrees.

7. The semiconductor wafer according to claim 5, wherein said first  
semiconductor wafer is a wafer for a support substrate,

said second semiconductor wafer is a wafer for an SOI layer, and

25           an insulating film is formed on a main surface of at least one of said wafer for

the support substrate and said wafer for the SOI layer.

8. A semiconductor wafer comprising first and second semiconductor wafers having bulk structures,

5 wherein said first and second semiconductor wafers are bonded with crystal orientations shifted from each other.

9. The semiconductor wafer according to claim 8, wherein both of said first and second semiconductor wafers are (100) wafers in which (100) planes are main  
10 surfaces, and

said crystal orientations are shifted from each other by 45 degrees or 135 degrees.

10. The semiconductor wafer according to claim 9, wherein said first  
15 semiconductor wafer is a wafer for a support substrate and said second semiconductor wafer is a wafer for a device formation, and

a main surface of said wafer for the device formation is provided with a semiconductor device including a MOS transistor in which a channel direction between a source and a drain is parallel with a direction of a crystal orientation  $\langle 100 \rangle$ .